



SWARC NEWS-11/23

Notes from KO4ZFO (Rodney)

First, let me thank all of those who attended the November meeting. We had quite a few new faces and had a couple of new members join. So, welcome to our new members. I would also like to thank our presenters for coming out and giving us a great presentation on CERT. I look forward to being a part of this and encourage all of you to consider participating.

Don't forget that JARSfest is quickly approaching, November 19th, so if you have time, please come out and support the club. We do have a club table this year, so we welcome any of our members to participate at our table. If you have any equipment that you would like to put on the table for sale, please let me know. We only get one table, so space will be limited.

Stay safe and warm, and I look forward to seeing everyone either at JARSfest or at our next meeting in December.

We ask you to keep the following in your thoughts and prayers:

Gary, KO4LQX, Kenny, KJ4CVK, Mike, KD4MC, and Steve, KA0GMY.

Steve, KA0GMY, continues to have health issues, so remember him, Steve Jr., and Miss Gloria as well (particularly).

Gary Plante, KO4LQX, continues to receive immunology treatments, but he is concerned about his very sore throat and the amount of coughing



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he does; this basically exhausts him and his voice. He needs our continued thoughts and prayers as it seems he still has many hurdles to overcome before healing is complete!

Velda Callam, K4VJC (SK), passed away on October 10th and was laid to rest on October 13th. While Mike seems to be doing okay, we should remember that it takes a long time to grieve and recover from the loss of one's spouse of many years.

Kenny, KJ4CVK, has ongoing health issues, so keep him in your thoughts.

SWARC de KO4ZFO

Notes from WB4SMS (Steve)

As Rodney said, the presentation was very informative and we received the following info regarding a CERT Team formation meeting to be held soon in Fuquay Varina. Please look at the screenshot included below and attend the meeting if you have an interest in learning more about CERT or to share ideas on training applicable to how the team would operate once formed.



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SWARC de WB4SMS

SWARC 1 November 2023 Meeting Minutes

The meeting was well attended and there was plenty of food. This was undoubtedly the best turnout of members and guests in quite some time. Stay tuned for info on the Holiday Meeting observance in early December.

Those in physical attendance were:

Richard Hall (K7RLH), Bill Blomgren (KK4QDZ), Al Crawford (WA4TCJ), Steve Suzanne (WB4SMS), Ken Castille (KN4GUS), Don Nicholson (KN4OEY), Paul Nicholson (KN4NGI), Brian Knox (KK4BK), Dave Krum (NW3U) without Miss Penny, Stan Disbrow (W2CK), Rodney Warren (KO4ZFO), Robert Walker (KQ4GSA), John Ostrander (KM4EZK), Steve Worth (NC4SW), Christy Fernandini (KJ4AEO), Gino Fernandini (KI4YXO), Matt Price (KE4NIP), and Ted Root (N1UJ).

Guests included Phil Warnick and our speaker(s) Samantha Royster (KI4ULR) and Jay Royster (KI4REM).

The official start for the meeting was 6:50 pm with Pledge of Allegiance led by Brian (KK4BK). Introductions were made around the room—we had guests as noted. Officer and chair reports are included in the body of these minutes or as newsletter items from our President and Vice President.



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Old/Unfinished Business

Steve (KA0GMY) moved that we donate \$300 to Danny Hampton (K4ITL) for repeater maintenance. This will be augmented by additions funds that we contribute at \$10/renewed member. The motion was seconded and passed. **No action taken yet as we are still verifying our member list due to late renewals.**

The other item of business is that our web site hosting fee is due in November and we need to see if the monthly draw can be taken directly from the bank account. No motion required.

New Business

None.

Program/Presentation

Samantha Royster, and husband Jay, delivered a presentation on CERT with the idea of soliciting interest in forming a team in Fuquay Varina. See previous info from Steve Suzanne in his comments.

Public Service

Check the HPSNC.org web site often for Public Service opportunities. The public service season is upon us and events need volunteers. You may also get to public service events on the RARS website.

Dave Krum (NW3U) noted that the season is over for this year, but you can always check the site for any changes, particularly in early spring 2024.



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TREASURER'S REPORT

Christy Fernandini's emailed report showed a modest increase in the finances during October from member renewals and one bank fee as a deduction. Balance of \$2,357.58 with no obligated funds or invoices outstanding. Overall, the club is healthy but we could use more renewals from members. Many of our long-standing members are on the brink of being eliminated—it's not too late to pay your renewal.

Respectfully submitted,
Richard Hall K7RLH
Secretary and Newsletter Editor

MEMBERSHIP

You can bring a check or cash for dues to the next meeting or mail them to the club PO box and Christy will advise she has received them. Also, you can now renew somewhat online by contacting Christy and giving her the appropriate credit card info for the 'Square' account. Christy's email is christyfernandini@outlook.com. Make checks payable to South Wake ARC and send to South Wake ARC – PO Box 1565 – Fuquay Varina, NC 27526

Don Nicholson (KN4OEY) is the new membership chair.



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NET REPORT

SWARC Group – October 2023

There were three hams who were net check-in champs for October; they are Bill, KK4QDZ, Al, WA3JJG, and Mark, KD7AAG. The monthly total of check-ins was 316—a slight decrease from last month! Note that **not** all net controls record their counts so numbers could actually be higher than recorded.

- Saturday and Sunday evenings will be called by KT4JR & K7RLH
- KO4ZFO will call Monday evenings
- KA0GMY will call Tuesday evenings (backup is K7RLH)
- KK4BK will call Wednesday evenings except on meeting nights
- KO4ZFO or a board member will call Thursday evenings
- Fridays will continue to be called by NC4MP
- And we need backups – JUST BECAUSE.

Please contact Rodney Warren, KO4ZFO, if you are interested in calling one or more nets.

SWARC Mission Statement

South Wake ARC's primary purpose is to further the Amateur Radio Service through programs, activities, and education, in order to promote the radio knowledge, fraternalism and individual operating efficiency of its members. Further, it shall be our purpose to support the



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welfare of our community through public service including radio communications for emergency situations and public events, and through providing information, training, and assistance to individuals or organizations with an interest in the Amateur Radio Service. Refer to the SWARC web site for the Board of Directors/Officers and Appointed Positions.

LINKS (if you have other links you want added then send them to me)

PRN

A Wide Area Digital Amateur Radio Network

www.ncprn.net

GigaParts

www.gigaparts.com

QRZ

www.qrz.com

Ham Radio Outlet HRO

www.hamradio.com

Raleigh Amateur Radio Society RARS

www.rars.org

Johnson Amateur Radio Society JARS

www.jars.net

South Wake Amateur Radio Club SWARC

www.southwakearc.com

Carolina 440 Network

www.carolina440.net

North Carolina Packet

www.ncpacket.com

TARPN (Terrestrial Amateur Packet Radio Net)

www.tarpn.net

Useful Ham Info

www.torborg.com/a



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Five County Ham Radio Enthusiasts

www.fivecountyhre.org

ARRL Podcasts

On the Air

Sponsored by [icom](http://icom.com)

The Solar Eclipse QSO Party: When Operating is Science

Gary Mikitin's, AF8A, article, "The Solar Eclipse QSO Party: A Fun Way Support Radio Science" in the September/October 2023 issue of *On the Air* details how hams can contribute data to a study on how the ionosphere reflects radio signals during the eclipse via an easygoing on-air event called the Solar Eclipse QSO Party. Gary, who is the Amateur Radio Community Coordinator of HamSCI, joins us on the October episode of the On the Air podcast, to talk about just how easy it is to participate.



ARRL Audio News

Listen to [ARRL Audio News](#), available every Friday. ARRL Audio News is a summary of the week's top news stories in the world of amateur radio and ARRL, along with interviews and other features.


The On the Air podcast is available on iTunes. The On the Air podcast and ARRL Audio News are also on blubrry -- [On the Air](#) | [ARRL Audio News](#).






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WARNING: BUILD INCREDIBLE WIRELESS PROJECTS



Discover The Dr.Duino Inventor Edition.
An ESP32, Arduino code compatible Kit

As seen In



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Announcements

The National Oceanic and Atmospheric Administration (NOAA) and the National Weather Service (NWS) are finalizing plans for 2023 SKYWARN™ Recognition Day. The event is held annually on the first Friday and Saturday of December, so this year it will be on Friday, December 1, and Saturday, December 2. SKYWARN Recognition Day was developed in 1999 by the NWS and ARRL. It celebrates the contributions that volunteer SKYWARN amateur radio operators make to the NWS. During the event, SKYWARN operators visit NWS offices and contact other radio operators across the world. More details about the event will be posted on the [SKYWARN™ Recognition Day](#) and [ARRL](#) websites.

The K1USN Radio Club has announced that due to a direct scheduling conflict with the upcoming 2023 CW ARRL Sweepstakes, they will cancel their regular November 6 0000 UTC SST session. We wish to take this opportunity to thank all of our regular SST participants and to encourage everyone to use that time to participate in the CW ARRL Sweepstakes, November 4 - 6, 2023. Complete Sweepstakes rules can be found here - <http://www.arrl.org/sweepstakes>. Please note that the ONLY K1USN SST session to be cancelled will be the November 6 0000 UTC K1USN SST session. All other sessions will take place as scheduled: Fridays 20:00-21:00 UTC; Mondays 00:00-01:00 UTC

In Brief...



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The International Telecommunication Union (ITU) will hold its 2023 World Radiocommunication Conference (WRC-23) on November 20 - December 15 in Dubai, United Arab Emirates. The ITU is the United Nations' specialized agency for information and communication technologies. Based in Geneva, Switzerland, the ITU includes 193 member states and several hundred Sector members and associates. WRC conferences are held every three to four years to review and revise, if necessary, the ITU Radio Regulations, which is the international treaty governing use of the radio frequency spectrum and geostationary satellite and non-geostationary satellite orbits. To learn more about the agenda for WRC-23, visit [WRC-23 Agenda items - WRC-23 \(itu.int\)](https://www.itu.int/WRC-23).

The ARRL Foundation is accepting applications for scholarships through January 10, 2024. The ARRL Foundation Scholarship Program supports eligible amateur radio operators pursuing higher education. The ARRL Foundation manages more than 100 scholarships established by generous donors ranging from \$500 to \$25,000. Scholarships will be awarded for the academic year that will begin no earlier than June 2024 following the application deadline. The scholarships vary in eligibility requirements.



ARRL Director of Development Kevin Beal, K8EAL, said the scholarships pave the way for amateur radio being a hands-on pathway to STEM careers. "We are so thankful to donors who give to ARRL education programs because they are investing the future of amateur radio. The ARRL Foundation Scholarship Program provides financial support at a critical time for students pursuing a college degree and keeps these young radio amateurs active in the hobby."

Additional information and a link to the application can be found at www.arrl.org/scholarship-program.

The [ARRL Foundation](http://www.arrl.org), celebrating its 50th year, administers programs to support the amateur radio community, and was established in 1973 by [ARRL](http://www.arrl.org).

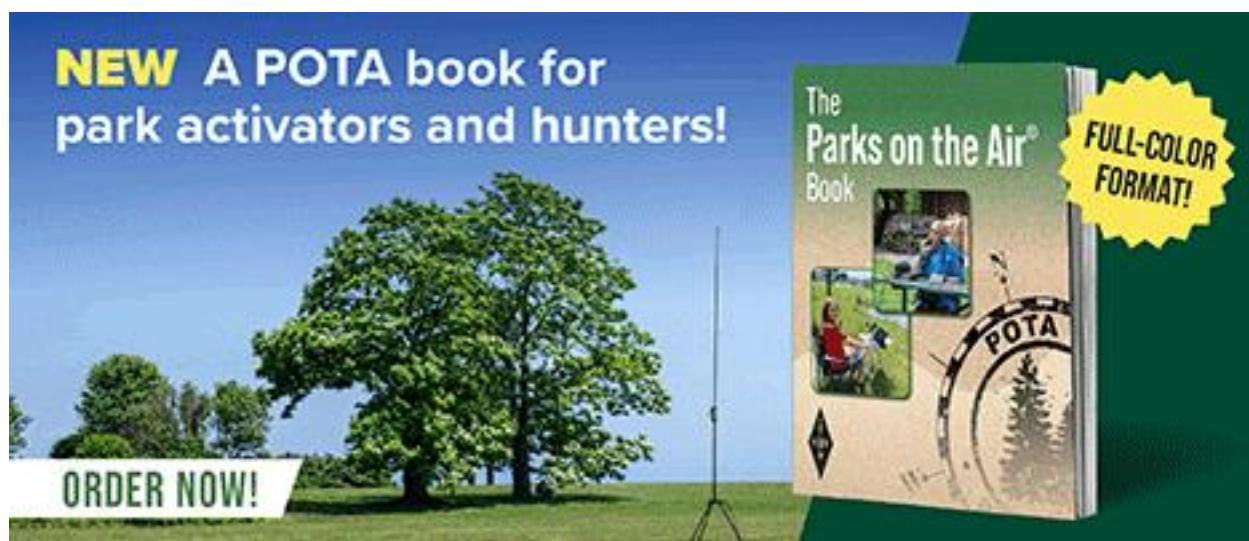
Here is a direct link to the application: <http://www.arrl.org/scholarship-application>

ARRL reminds readers about the [ARRL DX Log Archive](http://www.arrl.org/dx-log-archive), founded by JA1BK. The DX Log Archive program was created, thanks to an endowment established by Kan Mizoguchi, JA1BK, to obtain, preserve, and utilize paper logs from rare and significant DXpeditions. Paper logs of prominent DXpeditions or logs from stations and operators active from more rare locations from the 1950s through the 1980s, are the main items



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which we desire to save from the waste bin and archive at HQ. The archive includes pre-1950 paper logs as well as those from interesting operations, other documents from DXpeditions, and logs kept by long-time residents of rare entities. Logs which are now part of the Archive are indexed online and are being digitized and uploaded into Logbook of the World (LoTW) over time. Former ARRL Radiosport and Field Services Manager Dave Patton, KW9A (ex NN1N), manages the program. Patton noted the recent receipt of interesting logs for all the Colvin's operations; Fred Laun, K3ZO/HS0ZAR; Roger Western, EP2IA/G3TXF; John Snuggerud, LA1VC/3Y1VC (Bouvet Island); and Dick Spencely, KV4AA. Contact Patton at dxlogarchive@arrl.org for more information about logs or related DXing ephemera that might be of interest to the DX Log Archive, or to ask for a LoTW of the World confirmation for QSOs made with any of the hundreds of calls whose logs are available on the [DX Log Archive](http://dxlogarchive.org) webpage.



The K7RA Solar Update

Tad Cook, K7RA, of Seattle, Washington, reports for this week's ARRL Propagation Bulletin, ARLP044:



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Seven new sunspot groups emerged this reporting week. There were two on October 26, one on October 27, another on October 28, two more on October 31, and another on November 1.

Average daily sunspot numbers rose from 41.9 to 76.7, while the average daily solar flux increased from 123.5 to 137.5.

Predicted solar flux is 160, 162, and 162 on November 2 - 4; 160, 157, 150, 148, 136, 138, 136, and 134 on November 5 - 12; 130 on November 13 - 15; 125, 123, and 120 on November 16 - 18; 125 on November 19 - 22, and 130 on November 23 - 26.

Predicted planetary A index is 8, 5, 8, 12, 8, and 5 on November 2 - 7; 12 on November 8 - 9; 8 on November 10; 5 on November 11 - 13; 8 and 10 on November 14 - 15; 5 on November 16 - 21, and 15, 10, 15, 15, and 20 on November 22 - 26.

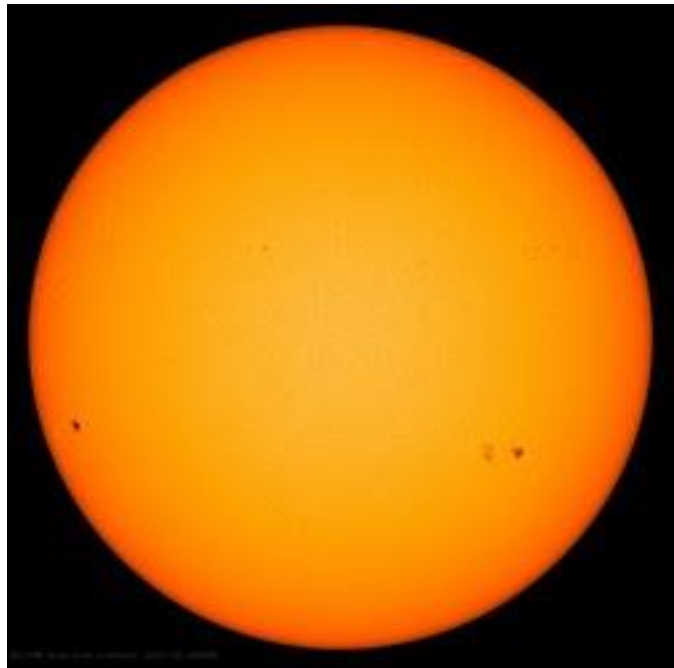
There might be an early peak of Solar Cycle 25. Read about it at <https://bit.ly/3FF26jh> and <https://bit.ly/40ndQQN>.

Sunspot numbers for October 26 through November 1 were 57, 66, 70, 61, 62, 116, and 105, with a mean of 76.7. The 10.7-centimeter flux was 126.4, 127.5, 128, 135.2, 139.7, 147.3, and 158.6, with a mean of 137.5. Estimated planetary A indices were 23, 11, 19, 28, 12, 9, and 9, with a mean of 15.9. Middle latitude A index was 18, 9, 13, 21, 10, 6, and 6, with a mean of 11.9.

Send your tips, questions, or comments to k7ra@arrl.net.

A comprehensive K7RA Solar Update is posted Fridays on the ARRL website. For more information concerning radio propagation, [visit](#) the ARRL Technical Information Service, [read](#) "What the Numbers Mean...", and [check out](#) the Propagation Page of Carl Luetzelschwab, K9LA.

A propagation bulletin [archive](#) is available. For customizable propagation charts, visit the [VOACAP Online for Ham Radio](#) website.



Solar disk image taken November 2, 2023. [Photo courtesy of NASA SDO/HMI]



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[Share](#) your reports and observations.

A weekly, full report is posted on [ARRL News](#).

Just Ahead in Radiosport

Yearlong -- [ARRL Volunteers On the Air](#) (VOTA). See the State Activations Schedule for weekly [W1AW Portable Operations](#), including:

- November 1 - 7 -- West Virginia W1AW/8
- November 1 - 7 -- Massachusetts W1AW/1
- November 1 - 7 -- Iowa W1AW/0
- November 8 - 14 -- Wyoming W1AW/7
- November 8 - 14 -- Maryland W1AW/3
- November 8 - 14 -- Kansas W1AW/0



Upcoming Contests:

- November 4 -- YB Banggai DX Contest (phone)
- November 4 -- IPARC Contest (CW)
- November 4 - 6 -- ARRL Sweepstakes Contest (CW)
- November 5 -- IPARC Contest, SSB (phone)



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- November 5 -- EANET Sprint (CW, phone, digital)
- November 5 -- High Speed Club CW Contest (CW)
- November 6 -- RSGB 80-Meter Autumn Series, Data (digital)
- November 7 -- ARS Spartan Sprint (CW)

Visit the [ARRL Contest Calendar](#) for more events and information.

Upcoming Section, State, and Division Conventions

- November 4 | [Wisconsin ARES/RACES Conference 2023](#), hosting the ARRL Wisconsin Section Convention, Wisconsin Rapids, Wisconsin
- November 4 - 5 | [Stone Mountain Hamfest](#), hosting the ARRL Georgia State Convention, Lawrenceville, Georgia
- November 18 - 19 | [Fort Wayne Hamfest and Computer Expo](#), hosting the ARRL Central Division Convention, Fort Wayne, Indiana.
- December 8 - 9 | [Tampa Bay Hamfest](#), hosting the ARRL West Central Florida Section Convention, Plant City, Florida
- January 6 - | [Ham Radio University](#), hosting the ARRL New York City-Long Island Section Convention, Brookville, New York

Search the [ARRL Hamfest and Convention Database](#) to find events in your area.

Have News for ARRL?

Submissions for the ARRL Letter and ARRL News can be sent to news@arrl.org. -- John E. Ross, KD8IDJ, ARRL News [Editor](#)

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- [Join or Renew Today!](#) Eligible US-based members can elect to receive [QST](#) or [On the Air](#) magazine in print when they join ARRL or when they renew their membership. All





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members can access digital editions of all four ARRL magazines: *QST*, *On the Air*, *QEX*, and *NCJ*.

- Listen to [ARRL Audio News](#), available every Friday.
- *The ARRL Letter* is available in an accessible format, posted weekly to the [Blind-hams Groups.io](#) email group. The group is dedicated to discussions about amateur radio as it concerns blind hams, plus related topics including ham radio use of adaptive technology.

Subscribe to...

- [NCJ -- National Contest Journal](#). Published bimonthly, features articles by top contesters, letters, hints, statistics, scores, NA Sprint, and QSO parties.
- [QEX -- A Forum for Communications Experimenters](#). Published bimonthly, features technical articles, construction projects, columns, and other items of interest to radio amateurs and communications professionals.

Free of charge to ARRL members...

- [Subscribe](#) to the *ARES Letter* (monthly public service and emergency communications news), the *ARRL Contest Update* (biweekly contest newsletter), Division and Section news alerts, and much more!
- Find ARRL on [Facebook](#)! Follow us on [Threads](#), [X](#), and [Instagram](#)!

NEWS FROM NC SECTION MANAGER MARV HOFFMAN

FEDERAL MATTERS

ARRL indicates that the FCC has an item on the agenda for its November meeting that the Commission may change its rules to remove the 300 baud digital rate limit on hf amateur bands. Such a vote, once it is followed by appropriate rule making and comment notices, would permit the use of Pactor 4 and other digital modes that can be accommodated within the 2.8 KHz bandwidth occupied by conventional SSB voice signals. Information on this matter can be found at <http://arrl.org/news/fcc-to-vote-on-removing-symbol-rate-restrictions>. The technical notice that was posted by the FCC on this topic can be



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found at <https://docs.fcc.gov/public/attachments/DOC-397992A1.pdf> .

You should not use Pactor 4 on amateur frequencies until and FCC and ARRL advise that the 300 baud rule has been eliminated. The process requires appropriate public notice and review of comments prior to final action.

CONGRESS APPARENTLY LIKES AM RADIO

Congress is working on passing proposed legislation that would mandate that every new vehicle sold in the United States would contain an AM radio. You may be surprised to learn that seven automobile manufacturers had announced that most of their electric vehicles would not have AM radios and AM radios were targeted for elimination from new conventional vehicles as well.

Lobbying by broadcasters has led a growing number of Congressional leaders to support AM IN EVERY VEHICLE ACT which has been introduced in both the US House of Representatives and Senate.

Arguments in favor of keeping AM radio are based the rules which require that broadcast stations carry Emergency Alert warning while there is a potential for cell towers going quiet during power outages. Higher power AM stations cover wider areas that cell towers and may well remain on the air even though a closer cell tower may go off the air. Broadcasters obviously have a vested interest in having car radios that receive their stations and the National Association of Broadcasters has lobbied Congress vigorously on this issue. Information can be found at

<https://www.govtrack.us/congress/bills/118/hr3413/summary> .

On the other hand, automobile manufacturers claim that AM radios in cars could cause interference with complex vehicle control systems and AM reception in new vehicles could be adversely affected by interference produced by the growing number of microprocessors extensively used in the newest cars.

US CONGRESSWOMAN DEBBIE LESKO (AR-8) ANNOUNCES SHE WILL NOT
SEEK
RE-ELECTION



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Described as a friend of ham radio and married to a ham (W2SSH), Congresswoman Debbie Lesko has announced she will not seek re-election to the US House of Representatives in 2024. During a recent Congressional hearing, Ms. Lesko directly asked the FCC Chairman about the long-pending rule making proceedings filed by the ARRL over a decade ago. ARRL noted that Congresswoman Lesko "introduced The Amateur Radio Communications Improvement Act (H.R. 3241) on May 11, 2023, to require that the Federal Communications Commission (FCC) eliminate the obsolete HF digital symbol rate limit with a 2.8 kHz bandwidth limit."

Information on the proposed FCC rule-making can be found at <http://arrl.org/news/fcc-to-vote-on-removing-symbol-rate-restrictions>.

Information about Congresswoman Lesko can be found at <https://www.abc15.com/news/state/rep-debbie-lesko-not-seeking-reelection-for-azs-8th-congressional-district>

PRN UPDATES

DMR radio using the TDMA modulation system continues to grow! According to data posted at radioid.net, there are 247,783 DMR radio id's that have been issued around the world. In the last 30 days, 1531 new DMR radio id's were issued by radsoid.net.

Drilling down into the data, the radio id database shows 110,290 radio id's assigned in the United States, including 4530 of which have been issued to persons who have addresses in North Carolina. In considering these numbers, please remember that the entries are for a person or group but there may be several DMR radios associated with a single radio id. For example, a single radio id might be show up on one or more portables, mobiles and even a hotspot.

Here is a short tutorial concerning the PRN DMR system which links 60 or so DMR repeaters in North and South Carolina. To help you understand the PRN system, look over the information posted at ncprn.net and scheart.us/digital for additional information about the PRN system.

- Only the talk groups that are listed at <https://ncprn.net/repeater/> may be used on the PRN system. Talkgroups listed on Brandmeister website as well as other hotspot-based networks will not work on the PRN system.



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- When you program your radio with the PRN talk groups, remember to associate the talkgroup with the correct timeslot. For example, on the PRN system the local talk group is used on Timeslot and programming it to use timeslot 2 will cause the C-Bridge to reject the communication.
- There is no pathway to the PRN system using a hotspot. This policy was made to protect the PRN repeaters from overheating and failing due to being keyed up for hour after hour (4 a.m. to 2 am on the next day). If that is what you want to listen to a properly set up hotspot that is connected to the Brandmeister server will allow you to talk around the world with an inexpensive portable radio using Brandmeister talk group 91 which carries worldwide traffic.
- In North Carolina the PRN repeaters were bought and are owned by individuals or clubs while in South Carolina, the repeaters are owned by South Carolina Emergency Management and were purchased using Homeland Security Grant funds.
- In North Carolina, the PRN repeaters use a variety of ways to connect to the CBridge (DSL, cable) whereas the South Carolina PRN repeaters are connected to the SC CBridge by means of the state microwave system that is operated by SC Public Television. In North Carolina. Internet connectivity expenses for linking the PRN repeaters to the NC C-Bridge are paid by the repeater owner or by a supportive club or user group.
- Operationally, proper protocol on the PRN system is to take extended conversations that begin on PRN off to Chat 1 or Chat 2 so that all 60 repeaters do not have to be activated when two or three linked repeaters can link those who want to talk.
- Do not set up your radios to send aprs packets over the PRN system and do not send private text messages from one radio to another over the PRN system.
- Selecting the Echotest talkgroup and making a short test transmission over a PRN repeater will result in the repeater playing back your audio test. This can be helpful by letting you hear how your radio sounds.



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- There are several parts of the PRN system in which a local talk group on one repeater is permanently connected to the local talk group on one or more repeaters to extend the coverage in that part of the state.

Those areas are as follows:

Boone Area includes Boone and Sugar Mountain

Charlotte Area includes Albemarle, Charlotte, Crowders and Wingate

Jackson local includes Cashiers, Cullowhee, Franklin and Sylva.

Raleigh area includes Cary, Raleigh, Hillsborough, Wilson

Triad Local includes Browns Summit, High Point and Sophia

Within the listed areas, talking over the local talk group on one repeater s carried on the local talk group of other repeaters in that listed area.

If managers in the Eastern Healthcare Preparedness Coalition system, or the WNC DMR network, wish to have information posted about their systems. Please drop me a line with the information you would like to have distributed.